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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

CHEN, TIANJIE

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,741

Applicant(s)

WOODS ET AL.

Examiner

Tianjie Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-7 and 10-13 is/are rejected.
- 7) ☒ Claim(s) 8 and 9 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Non-Final Rejection

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 5, 6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Green (US 5,517,376).

Claim 5, Green shows a clamp in Figs. 3-7 including: a round, disc shaped body having an outer, round peripheral edge; the body having a central hole to mate to a hub; the body having a lower surface with a clamp to disc contact surface; the clamp to disc contact surface further including a peripheral edge and an inner edge; the clamp to disc contact surface having a straight line segment along a radius from a center of the hub to the peripheral edge; and the straight line segment having an incline angle starting at the peripheral edge and extending upward to the inner edge of the clamp to disc contact surface.

Claim 6, Green shows that the straight line segment incline angle is continuous along the entire clamp to disc contact surface.

Claim 11, Green shows a disc clamp including: an annular clamp means functioning to fit over a hub to hold a disc tightly to the hub; the annular clamp means having a lower clamp to disc surface means, functioning to push the disc against the hub; the annular clamp means having a taper means functioning to start a taper at an outer edge of the clamp to disc surface means to an ending inside edge of

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the clamp to disc surface means; wherein a fastener means functions to force the annular clamp means against the hub; and wherein a force emanating outbound from the fastener means is distributed about evenly along the clamp to disc surface means, thereby minimizing a distortion of the disc (Column 5, lines 29-37).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Green.

Claims 7 and 12, Green further shows in Fig. 5 that the taper is close to three degrees but does not specify the exact number of degrees of the angle. However, there is no unexpected result has been disclosed in this Application, i.e. why is three degree, not four or five or other number of degrees. It would have been obvious at the time the invention was made to one of ordinary skill in the art to find a suitable angle from optimization and experimentation, that would include an angle of about three degrees.

3. Claims 10 and 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Green in view of Adams (US 7,002,774).

Claims 10 and 13 claim a clamp or a disk clamp. The limitation of “a disc base wherein the disc is assembly which further contains one or more raised ribs incorporated onto the inner surface of the disc base, thereby directing circulating air towards a filter” is not a part of the clamp or disk clamp; therefore, it is a secondary limitation, which gains no weight in determining patentability.

With regard to claims 10 and 13, Adams shows a disc is assembly which further contains raised rib 128 (Fig. 1) incorporated onto the inner surface of the disc base, thereby directing circulating air towards a filter 126. Adams teaches that a device with such constructed filter can be used for continuously increasing in disk speed for faster data access (Column 1, lines 48-51). One of ordinary skill in the art would have been motivated to use Adams's base structure for faster data access.

Allowable Subject Matter

4. Claims 1- 4 are allowed.

Claims 8 and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

- With regard to independent claim 1 and dependent claim 8, , as the closest reference on record, Green (US 5,517,376) discloses a rotating disc drive

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assembly having a powered hub, which rotates a flat, annular disc, a clamp being used to fasten the disc to the powered hub via connecting fasteners, an improvement including: the clamp having a generally annular shape with a peripheral contact surface which faces downward against an upper surface of the disc; the peripheral contact surface having a straight line segment along a radius from a center of the hub; the straight line segment starting from an inner edge to an outer edge of the peripheral contact surface; the straight line segment further including a taper starting from the outer edge upward toward the inner edge; and wherein when the fasteners fastened a force emanating from the fastener outbound to the outer edge of the peripheral contact surface causes the clamp to distort downward from the inner edge to the outer edge of the peripheral contact surface, **but fails to show** that the deformation forces the inner edge in contact with the upper surface of the disc, thereby distributing the downward force on the fastener along an entire length of the straight line segment.

- Applicant asserts that the present is for fastening of rotating circular plates to prevent a disc from being warped due to the force associated with disc clamping (Specification, p. 1).

Conclusion

5. The prior art made of record in PTO-892 form and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TIANJIE CHEN
PRIMARY EXAMINER